

Docket No.: 96790.P197d3
Express Mail #EV339906522US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Fumihiko Kobayashi et al.

Divisional of Serial No.: 10/067,553

For: **OPTICAL SEMICONDUCTOR
DEVICE AND METHOD OF
FABRICATING THE SAME**

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Arlington, VA 22313-1450

Dear Sir:

In accordance with 37 CFR 1.56, Applicant hereby discloses the prior art references that have been submitted and/or cited in the following related applications/patents:

Serial No.	Filing Date	Patent No.	Issue Date
10/067,553	February 4, 2002	---	---
09/027,012	February 18, 1998	6,430,986	June 11, 2002
08/534,333	September 27, 1995	5,783,844	July 21, 1998

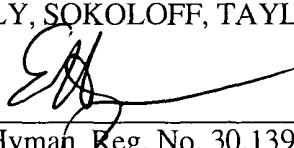
Forms PTO-1449 (modified), PTO-1449 and PTO0892 are enclosed herewith. Copies of the references are not provided as permitted by 37 CFR 1.98(d).

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

Date: 8/26/03

By: _____


Eric S. Hyman Reg. No. 30,139

12400 Wilshire Boulevard
Seventh Floor
Los Angeles, California 90025
(310) 207-3800

ESH:kla

-2-

Copied from 10003433 on 03-02-2004

Notice of References Cited		Application No. 09/027,012	Applicant(s) Kobayashi et al.
		Examiner Huy Bui	Group Art Unit 2815
Page 1 of 1			

U.S. PATENT DOCUMENTS

	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS
A	5,346,854	9/13/94	Ahn et al.	437	129
B	4,788,159	11/29/88	Smith	437	90
C	4,335,501	6/22/82	Wickenden et al.	29	569
D					
E					
F					
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H					
I					
J					
K					
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M					

FOREIGN PATENT DOCUMENTS

	DOCUMENT NO.	DATE	COUNTRY	NAME	CLASS	SUBCLASS
N						
O						
P						
Q						
R						
S						
T						

NON-PATENT DOCUMENTS

	DOCUMENT (Including Author, Title, Source, and Pertinent Pages)	DATE
U		
V		
W		
X		

Form PTO-1449 (Modified)		Atty Docket No. 96790P197D	Application No. 09/027,012
List of Patents & Publications Statement <i>JAN 25 2001</i>			
(Use several sheets if necessary)		Applicant(s): F. Kobayashi	
		Filing Date: February 20, 1998	Group No.: 2815

U.S. PATENT DOCUMENTS

Exam. Initials		Document Number	Date	Name	Class	Sub-class	Filing Date (if appropriate)
<i>JK</i>	AA	5104824	04/14/1992	Clausen Jr., et al.	437	90	
	AB	5094973	03/10/1992	Pang	437	67	
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS

Exam. Initials		Document Number	Date	Country	Class	Sub-class	Translation Yes No
<i>JK</i>	AL	EP 0 588 747 A2	23/03/1994	Europe	H01L 21	76	X
	AM						
	AN						
	AO						
	AP						
	AQ						

OTHER ART (Including Title, Author, Date, Pertinent Pages, etc.)

Exam. Initials		Document Identification
<i>JK</i>	AR	Patent Abstracts of Japan, vol. 17, no. 174, April 5, 1993
<i>JK</i>	AS	Patent Abstracts of Japan, vol. 16, no. 390, August 19, 1992
<i>JK</i>	AT	

Examiner: J. Jackson Date Considered: 3/01

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication

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X

PTO/SB/08A (08-00)

Approved for use through 10/31/2002 OMB0851-0031

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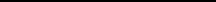
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Substitute for Form 1449A/PTO		Complete if Known	
O I P E INFORMATION DISCLOSURE STATEMENT BY APPLICANT OCT 09 2001 <small>(use as many sheets as necessary)</small>		Application Number	09/027,012
		Filing Date	02/18/98
		First Named Inventor	Kobayashi
		Group Art Unit	2815
		Examiner Name	Jerome Jackson Jr.
1 sheet	1	of	Attorney Docket Number
		96790.P197D	

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS					
Exam. Initials	Cite No.	Document Number	Name of Patentee or Applicant of Cited Document	Date of Publication or Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		01175792 A	NEC Corp	7-12-89	
		63227087 A	Fujitsu Ltd.	9/21/88	
		02098985 A	Mitsubishi Electric Corp	4-11-90	
		02022880 A	Fujitsu Ltd	1-25-90	
		63046789 A	NEC Corp	2-27-88	
		03012984 A	Nippon Telegr & Teleph Corp	1-21-91	

Examiner Signature		Date Considered	10/01
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***EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²Applicant is to place a check mark here if English language Translation is attached.

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OCT 09 2001

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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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<p style="text-align: center;">INFORMATION DISCLOSURE STATEMENT BY APPLICANT</p> <p>(Use as many sheets as necessary)</p> <p>Sheet 2 of 2</p>		Complete if Known	
		Application Number	
		09/027,012	
		Filing Date	
		02/18/98	
		First Named Inventor	
Kobayashi			
Group Art Unit			
2815			
Examiner Name			
Jerome Jackson Jr.			
Attorney Docket Number			
96790.P197D			

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

SEARCHED AND INDEXED DOCUMENTS					
Exam. Initials	Cite No.	Document Number	Name of Patentee or Applicant of Cited Document	Date of Publication or Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
<i>[Signature]</i>		1-187944		7-27-89	
<i>[Signature]</i>		04127148 A	Hitachi Ltd Hitachi VLSI Eng Corp	4-28-92	
<i>[Signature]</i>		04330765 A	Hitachi Ltd. Hitachi Haramachi Semiconductor Ltd.	11-18-92	

Examiner Signature		Date Considered	10/01
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***EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

01/13/97

Form PTO-1449 (Modified)		Atty Docket No. 96790.P197	Serial No. 08/534,333
List of Patents & Publications Statement (Use several sheets if necessary)		Applicant(s): Fuhihiko Kobayashi et al.	
		Filing Date: September 27, 1995	Group No.:

U.S. PATENT DOCUMENTS

Exam. Initials		Document Number	Date	Name	Class	Sub-class	Filing Date (if appropriate)
MX	AA	5,104,824	4/14/92	CLAUSEN, JR. et al.	437	90	
MX	AB	3,425,879	2/4/69	D.W. SHAW et al.	148	175	
	AC						
	AD						
	AE						
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	AH						
	AI						
	AJ						
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Exam. Initials		Document Number	Date	Country	Class	Sub-class	Translation Yes No
MX	AL	EPA0261408	8/21/87	EUROPE	H01S	19	X
	AM						
	AN						
	AO						
	AP						
	AQ						

OTHER ART (Including Title, Author, Date, Pertinent Pages, etc.)

Exam. Initials		Document Identification
MX	AR	PATENT ABSTRACTS OF JAPAN, vol. 10, no. 186, June 28, 1986 & JPA61032587
MX	AS	PATENT ABSTRACTS OF JAPAN, vol. 7, no. 154, July 6, 1958 & JP58064086
MX	AT	INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, pages 48-50

Examiner: M. KelleyDate Considered: 5/97

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication

Form PTO-1449 (Modified)		Atty Docket No. 96790.p197	Serial No. 08/534,333
List of Patents & Publications Statement (Use several sheets if necessary)		Applicant(s): FUMIHIKO KOBAYASHI et al.	
		Filing Date: 9/27/95	Group No.: 1109

U.S. PATENT DOCUMENTS

Exam. Initials		Document Number	Date	Name	Class	Sub-class	Filing Date (if appropriate)
ML	AA	5,094,973	3/10/92	PANG	437	67	
	AB						
	AC						
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	AG						APR 11 1997
	AH						
	AI						
	AJ						
	AK						GROUP 1100

FOREIGN PATENT DOCUMENTS

Exam. Initials		Document Number	Date	Country	Class	Sub-class	Translation Yes	No
ML	AL	EP-0 588 747 A2	8/24/93	EUROPE	H01L	76	X	
	AM							
	AN							
	AO							
	AP							
	AQ							

OTHER ART (Including Title, Author, Date, Pertinent Pages, etc.)

Exam. Initials		Document Identification
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	AS	
	AT	

Examiner: M. Keller Date Considered: 5/97

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication

Sheet _____ of _____

FORM PTO-1449 (REV. 7-80)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO.	SERIAL NO.		
LIST OF PRIOR ART CITED BY APPLICANT <i>(Use separate sheets if necessary)</i>				APPLICANT	#2		
				FILING DATE	GROUP		
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME		CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AA							
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FOREIGN PATENT DOCUMENTS							
	DOCUMENT NUMBER	DATE	COUNTRY		CLASS	SUBCLASS	TRANSLATION
AL	KOKAI 63-31111	Feb. 9, 1988	Japan		-	-	YES NO
AM	KOKAI 63-287014	Nov. 24, 1988	Japan		-	-	
AN	KOKAI 63-311786	Dec. 20, 1988	Japan		-	-	
AO	KOKAI 1-175727	July 12, 1989	Japan		-	-	
AP							
OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)							
MK	AR	"Digital Signal Regeneration with Side-Injection-Light-Controlled Bistable Laser Diode as a Wavelength Converter"					
		by K. Nonaka, et al. IEEE PHOTONICS TECHNOLOGY LETTERS, Vol. 7, No. 1, January 1995, pp. 29-31					
MK	AS	"VERY RAPID AND SELECTIVE EPITAXY OF InP AROUND MESAS OF HEIGHT UP TO 14 μm BY HYDRIDE VAPOUR PHASE EPITAXY" by					
		S. Lourdudoss, et al. 6th Int. Conf. on Indium Phosphide and Related Materials, Santa Barbara, (1994) pp. 615-618					
MK	AT	"PLANAR SURFACE BURIED-HETEROSTRUCTURE InGaAsP/InP LASERS WITH HYDRIDE VPE-GROWN Fe-DOPED HIGHLY RESISTIVE CURRENT-BLOCKING LAYERS" by S. Sugou, et al. ELECTRONICS LETTERS 6th November 1986 Vol. 22 No. 23 pp. 1214-1215					
		Copied from 10003452 on 03-02-2004					

NOTICE OF REFERENCES CITED

APPLICANT(S)

Kobayashi et al.

U.S. PATENT DOCUMENTS

*	DOCUMENT NO.	DATE	NAME	CLASS	SUB-CLASS	FILING DATE IF APPROPRIATE
A						
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FOREIGN PATENT DOCUMENTS

*	DOCUMENT NO.	DATE	COUNTRY	NAME	CLASS	SUB-CLASS	PERTINENT SHTS. DWG.	PP. SPEC.
L								
M								
N								
O								
P								
Q								

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

Kobayashi et al. "Rigidity of Semiconducting Iron doped In P..."

1974-04-17 42 45-50